REMARKS

The Examiner is thanked for the examination of the application. However, in view of the remarks that follow, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

35 USC 112, first paragraph:

Claims 1 - 12 and 22 - 24 have been rejected under 35 USC 112, first paragraph. The Examiner alleges that the claim language "irrespective of the first condition" is not supported by the specification. Applicants submit that the language is indirectly supported by the application. And, to expedite prosecution, the specification has been amended to use the claim language in the specification. Applicant submits that if the binarizing operation is carried out on all the pixels within an input image; the target pixels are inherently selected irrespective of any conditions. Therefore, the revision to paragraph [0039] is not new matter and provides the requisite written description for the claims.

Accordingly, the Examiner is respectfully requested to enter the foregoing amendment to the specification and to withdraw the rejection under 35 USC 112, first paragraph.

Art Rejections:

Claims 1, 2, 6 - 8, 12, and 22 - 24 have been rejected under 35 U.S.C. §103(a) as being allegedly obvious over U.S. Patent No. 6,766,056, hereinafter *Huang*, in view of U.S. Patent No. 5,396,584, hereinafter *Lee*.

One of the objects of the present invention is to provide an efficient method for *determining whether or not an image has a specified pattern.* A set forth in the specification, one purpose if for detecting patterns that are used in currency so as to prevent the generation of counterfeit currency.

In one embodiment, the present invention achieves these goals by selecting a target pixel irrespective of the first condition, which is described elsewhere in the claim. In the preferred embodiment, all of the pixels are selected as target pixels. However, the present invention is not limited to the preferred disclosed embodiments.

The Examiner interprets *Huang* such that **all** of the pixels 0 − 7 in FIG. 5 are ultimately sent to the thresholding binary buffer 43, and that therefore, the illustrated pixels 0 − 7, including the lag pixels 4 − 7, have already been sub-sampled. A more detailed discussion of this issue is presented in previous responses, and is incorporated herein by reference. In the Office Action dated April 28, 2009, the Examiner acknowledges that *Huang* does not explicitly teach a selection of a target pixel can be irrespective of the first condition. To overcome this deficiency, the Examiner relies upon *Lee*, alleging that *Lee* discloses selection of a target pixel irrespective of a condition. The Examiner alleges that it would have been obvious to modify *Huang's* method to select a target pixel regardless of other conditions.

Applicant submits that the Examiner's position is legally untenable.

There is no clear articulation of why the invention would be obvious:

It is well recognized that even *KSR* requires that an obviousness rejection be supported by an explicit analysis with "some articulated reasoning with some rational

underpinning". To allegedly fulfill this requirement, the Examiner merely concludes that "Modfiying Huang's method of processing method according to Lee would be able to select a target pixel regardless of other conditions. This would improve processing because it would help in the process of smoothing edges (column 12, lines 35 - 40) and therefore, it would have been obvious to one of ordinary skill in the art to modify Huang according to Lee."

However, as set forth in the claims, the present invention is for "determining whether or not the image has a specified pattern, based upon binarized values." Thus, the object of the invention is to determine whether or not the image has a specified pattern. The invention has nothing to do with altering the image data or otherwise improving the appearance of the image. Thus, the Examiner's basis (to help in the process of smoothing edges) has nothing to do with the present invention, the aim of which is to determine whether or not the image has a specified pattern.

Since smoothing edges is irrelevant to the present invention, the Examiner's combination is made solely on hindsight, using that which the inventor taught against him.

The proposed modification of Huang is inconsistent with other positions:

In addition, the Examiner's proposed alleged modification to *Huang* is inconsistent with other positions that the Examiner has taken. Since the Examiner takes the position that the pixels in the pixel buffer pipe 42 (which are illustrated in Figure 5) have already been subsampled, it is clear that the target pixels (pixel 0) have already been downsampled to a predetermined resolution. Thus, they have been selected according to a prescribed absolute position in the original image data.

It is not clear how the resulting modified system of *Huang* would operate. Would the pixels in the pixel buffer pipe 42 not be subsampled?

If the pixels in the pixel buffer pipe 42 are not subsampled, the lag pixels 4 – 7, which are sent to the threshold determining unit 45 would be selected before the sub-sampling (which the Examiner alleges corresponds to the claimed "first condition"). Such lag pixels would not meet both the first and second conditions because there is no way of determining whether or not the lag pixels will be culled in the sub-sampling step. Since the lag pixels do not meet both the first and second conditions, *Huang* does not teach claim 1 as now amended, which now requires a selector for selecting a target pixel included in the image data and also selecting ***at least one related pixel which satisfies the stored first condition and the stored second condition*** relative to the selected target pixel.

In the event that the Examiner maintains the current rejection, the Examiner is respectfully requested to articulate how *Huang* would be modified by *Lee*.

Accordingly, claim 1 is patentable over *Huang* and *Lee*. Claims 2, 6, 7, 8, 12, and 22 – 24 are patentable at least for the same reasons. With regard to claims 3, 4, 9 and 10, *Bloomberg* and *Kanno* do not overcome the deficiencies set forth above with respect to *Huang* and *Lee*.

Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejections of claims 1 – 11, 12 and 22-24 in view of the foregoing remarks.

In the event that there are any questions concerning this response, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: <u>September 9, 2009</u>   By: <u>/WCRowland/</u>
                                        William C. Rowland
                                        Registration No. 30888

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620